IN THE SPECIFICATION:

Page 3, please replace paragraph beginning on line 29 as follows:

Mature human lactadherin is a 364 amino acid protein. Furthermore, lactadherin is a secreted protein and comprises a secretion signal. SEQ ID NO:1 represents the polynucleotide and amino acid sequence of human lactadherin. Residues 1 to 23 of the amino acid sequence (underlined) represent the secretion signal, and residues 24-387 represent the primary structure of the mature, secreted protein. The murine, bovine and porcine lactadherin have also been identified, isolated and sequenced (see for instance Stubbs et al., PNAS 87 (1990) 8417; Hvarregaard et al., Eur. J. Biochem. 240 (1996) 628). The polypeptide and amino acid sequence of the murine lactadherin is also represented on SEQ ID NO:3. Amino acid residues 1-22 represent the secretion signal, and residues 23-463 represent the primary structure of the mature, secreted protein. Residues 111-147 are deleted in splicing variants of murine lactadherin.

Page 5, please replace paragraph beginning on line 18 as follows:

Within the context of the present invention, lactadherin means a protein of mammalian origin, expressed at the surface of milk fat globules, and comprising a RGD site and a domain homologous to the factor VIII C-terminal region (i.e., a factor VIII-like domain). More specifically, the protein is of human, bovine, murine or porcine origin, more preferably of human origin. In a particular embodiment, lactadherin means human lactadherin having the sequence of SEQ ID NO: 1 or any functional analogs thereof. The term functional analogs designates natural analogs, resulting for instance from the polymorphism or from post-translational modifications, in particular from splicing(s) or single amino acid deletion, substitution or addition, with

reference to the amino acid sequence of SEQ ID NO: 1, and which retain at least one functional property of human lactadherin. Functional analogs also include lactadherin of other species, in particular murine lactadherin of SEQ ID NO:3.

Page 7, please replace paragraph beginning on line 4 as follows:

Variants lacking a functional PL binding site are essentially incapable of efficiently binding phospholipids such as phosphatidyl serine. Such variants however, may retain a functional integrin binding site and thus behave as competitors of natural lactadherin. Variants lacking a functional PL (i.e., phosphatidyl serine) binding site can be obtained by different methods. In a particular embodiment, said variants lack all or part of the phosphatidyl serine (PS) binding site. In another particular embodiment, such variants comprise a mutated PS binding site. Of course, variants of this invention can also comprise both deletion and mutation in the PS binding site. The phosphatidyl serine binding site of lactadherin essentially lies in the C-terminal amino acid residues of lactadherin, more particularly in the 150 C-terminal amino acid residues. A variant according to this invention is therefore any variant of lactadherin having a mutation and/or a deletion in/of the 150 C-terminal amino acid residues, and essentially incapable of binding phosphatidyl serine. A more preferred variant is a polypeptide comprising the amino acid sequence of SEQ ID NO:1, said sequence further comprising a mutation and/or a deletion in any one of amino acid residues 242 to 387.

Page 8, please replace paragraph beginning on line 14 as follows:

Variants of lactadherin lacking a functional integrin binding site are essentially incapable of binding efficiently dendritic cells. Such polypeptides can be any variant of lactadherin lacking all or part of the integrin binding site or which comprise a mutated integrin binding site. The integrin binding site of lactadherin essentially resides in an RGD motif located in the N-terminal part of the molecule. For instance, the integrin binding site of human lactadherin of the amino acid sequence of SEQ ID NO:1 lies in residues 46-48 and the integrin binding site of murine lactadherin of SEQ ID NO:4 lies in residues 87-89. The invention therefore resides, in any lactadherin comprising a mutation in and/or a deletion in or of the RGD motif, and which is essentially incapable of binding dendritic cells. Particular examples of such variants are polypeptides of SEQ ID NO:1 which lack one, two or all of the amino acid residues RGD at position 46-48, and polypeptides of SEQ ID NO:4 which lack one, two or all of the amino acid residues RGD at position 87-89.

Page 8, please replace paragraph beginning on line 28 as follows:

Such variants can be used for instance to interfere with the cross-priming of antigens, in vitro, ex vivo or in vivo, by competing with naturally occurring lactadherin for the binding to particulate antigens. Other types of inhibitors are represented by polypeptides comprising essentially the phospholipid binding site of lactadherin, for instance peptides comprising essentially the amino acid residues 364-385 of the amino acid sequence of SEQ ID NO:1, or variants thereof. Other inhibitors are represented by antibodies specific for lactadherin, in particular for lactadherin PL or integrin binding sites. Such antibodies (either polyclonals or

monoclonals) can be raised by immunisation of an animal using corresponding peptides, and used to reduce an immune reaction.

Respectfully submitted,

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